

Women are bitchy but men are sarcastic? Investigating gender and sarcasm

Article (Accepted Version)

Taylor, Charlotte (2017) Women are bitchy but men are sarcastic? Investigating gender and sarcasm. *Gender and Language*, 11 (3). pp. 415-445. ISSN 1747-6321

This version is available from Sussex Research Online: <http://sro.sussex.ac.uk/id/eprint/65269/>

This document is made available in accordance with publisher policies and may differ from the published version or from the version of record. If you wish to cite this item you are advised to consult the publisher's version. Please see the URL above for details on accessing the published version.

Copyright and reuse:

Sussex Research Online is a digital repository of the research output of the University.

Copyright and all moral rights to the version of the paper presented here belong to the individual author(s) and/or other copyright owners. To the extent reasonable and practicable, the material made available in SRO has been checked for eligibility before being made available.

Copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational, or not-for-profit purposes without prior permission or charge, provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

Women are bitchy but men are sarcastic?: Investigating gender and sarcasm

Abstract

In this paper I investigate one aspect of the relationship between gender and mock politeness, focussing in particular on sarcastic behaviours. Previous research into sarcasm as an academic concept has suggested that it is more likely to be performed by male speakers. In the British forum data analysed here, there was no correlation between performances of mock politeness and gender. However, there was a preference for labelling male mock polite behaviour as *sarcastic*, suggesting that the correlation is not between the academic concept of sarcasm and the male behaviour, but between the choice of metapragmatic label and gender of person described. The analysis draws on corpus linguistics, supplemented by survey data, to further describe the relationship between the metapragmatic labels *sarcastic* and *bitchy* and gender of the performer.

Keywords: mock politeness; sarcasm; gender; corpus pragmatics

1. Introduction

In this study I survey previous claims relating to the relationship between sarcasm and gender and evaluate the influence that previous methods may have had on these findings. More specially, I examine whether sarcasm is more likely to be performed by male speakers or whether mock polite behaviour performed by a man is likely to be labelled differently from the same behaviour when performed by a woman. In investigating the relationship between sarcasm and gender, I take a three-stage approach to the investigation, combining the methodologies of Corpus-Assisted Discourse Studies (Partington 2004; Partington et al. 2013) with an experimental approach more common in psychological studies of irony. In so

doing, I intend to follow in the footsteps of Baker (2014) who shows the range of ways in which corpus linguistics and gender study may interact.

1.1 Introducing mock politeness

The definition of mock politeness, as understood in this paper, is that:

mock politeness occurs when there is an im/politeness mismatch leading to an implicature of impoliteness

Therefore, examples such as the following (cited in a discussion of how to be impolite in the forum used in this study) would be covered within the definition:

(1) Off you fuck, there's a love.

(2) I won't carry on, it's not fair to engage in a battle of wits with an unarmed person

In each example, we have both polite and impolite moves in the same utterance, with the final reception (according to those who suggested them) being one of impoliteness.

Most research into mock politeness has been carried out under the headings of *irony* and *sarcasm*, and this applies both within im/politeness studies and outside this field, for instance in irony studies itself. The first significant theorisation of mock politeness within a frame of im/politeness occurs in Leech (1983) who describes irony as ‘an apparently friendly way of being offensive (mock-politeness)’ (Leech 1983: 144), thus equating irony and mock politeness. This understanding of mock politeness was integrated and applied in Culpeper’s (1996) model of impoliteness and subsequent developments of this (Culpeper et al. 2003; Culpeper 2005). In more recent work, Leech (2014) reasserts the importance of indirectness in his definition of what he now terms ‘sarcasm or conversational irony’, stating that:

In order to be ironic, S expresses or implies a meaning (let's call it Meaning I) that associates a favorable value with what pertains to O (O = other person(s), mainly the addressee) or associates an unfavorable value with what pertains to S (S = self, speaker). At the same time, by means of Meaning I and the context, *S more indirectly implies a second, deeper meaning (Meaning II)* that cancels out Meaning I by associating an unfavorable value with what pertains to O, or associating a favorable meaning with what pertains to S.

Leech (2014: 233, italics added)

However, this definition cannot fully account for what Leech (2014) terms *attitude clash*, which is defined as 'a case where the overt "polite" meaning and the "impolite" meaning of irony occur side by side in the same piece of language' (2014: 238), as illustrated in example (1). Although Leech recognises this more overt form, he does not resolve the (acknowledged) discrepancy between a definition that relies on covert and deniable expression of impoliteness and the on-record nature of this kind of mock politeness.

The definition used here accounts for both kinds of mock politeness that Leech (2014) was addressing, what Taylor (2011) termed *co-textual* and *contextual* mismatch and what Culpeper (2011) identifies as two types of convention-driven implicational impoliteness:

- (1) Internal: the context projected by part of a behaviour mismatches that projected by another part;
- (2) External: the context projected by a behaviour mismatches the context of use.

Culpeper (2011: 155)

The inclusion of *mismatch* in the definition adopted for this study is central to how mock politeness is understood and key features in describing and comparing mock polite

behaviours which will be used here are which aspects are mismatched (discussed further in Section 3.1.1) and the location of the mismatch, that is whether it is external or internal.

In previous research into the metalanguage of mock politeness (Taylor 2015a), I found that the following metapragmatic labels referred to mock politeness in the British forum used here (they are presented in order of the percentage of events which involved mock polite behaviours): *patronising, sarcastic, biting, condescending, cutting, caustic*, MAKE FUN, MOCK, BITCHY, TEASE, *ironic, passive aggressive, put down, overly polite*.¹ Therefore, when I talk about the proportions of mock polite behaviours in Section 4.2, I am referring to all mock polite behaviour which was identified in the corpus, and which may have been described using any of these metapragmatic labels.

1.2 First and second order concepts

A distinction to which I will return throughout this study is that of first and second order descriptions, which is one of the primary distinctions made in current studies of im/politeness. Watts et al. (1992) initiated discussion of this distinction with reference to im/politeness, stating that:

We take first-order politeness to correspond to the various ways in which polite behaviour is perceived and talked about by members of socio-cultural groups. It encompasses, in other words, commonsense notions of politeness. Second-order politeness, on the other hand, is a theoretical construct, a term within a theory of social behaviour and language usage

Watts et al. (1992:3)

¹ Small cap are used to refer to lemmas, therefore MAKE FUN includes *make fun, makes fun, made fun, making fun*.

The importance of studying first order im/politeness has been emphasised in recent years, in particular with the development of the discursive approach, which emphasises the central role of lay understandings (see Eelen 2001; Mills 2009; Locher & Watts 2005). It is a particularly relevant distinction in work on mock politeness because much theoretical work in this area has gone under the terms *irony* or *sarcasm*, which are both also used as first-order terms in lay discussions, thus leading to potential blurring of the first/second order distinction. Indeed, in some work on irony and sarcasm it is often unclear whether the researchers are using first or second order models, or even if they distinguish between the two. For instance, Kreuz & Glucksberg (1989) define ‘nonsarcastic irony’ as follows:

An example of nonsarcastic irony would be "Another gorgeous day!" said when it has been gray and raining for the 15th day in a row. The remark about the gorgeous day would *normally* be interpreted as rueful and ironic, indicating displeasure with the weather, but not necessarily as an intention to hurt anyone.

Kreuz & Glucksberg (1989: 374, my italics)

The fact that the term *nonsarcastic irony* (and others) was defined with reference to ‘normal’ interpretation suggests that they are thinking of an atheoretical model, and yet this is not clear in the rest of the article which constitutes a very influential theoretical paper on irony. In the following section, I discuss research into sarcasm, which, in the second order sense overlaps significantly with mock politeness and in Section 3 I return to the issues of using a second-order term as a first-order label to elicit lay discussion.

2. Previous research into sarcasm and gender

Previous research into the relationship between irony/sarcasm and gender has focussed on whether male/female participants are more likely to use these behaviours; whether they use

them in different ways and for different pragmatic functions; whether the gender of the addressee or social group has an impact on the frequency of use; whether ironic/sarcastic utterances are more likely to be attributed to male/female participants.

The issue of frequency has received most attention and while the consensus has been that men use sarcasm more than women, this factor has been measured in several different ways which naturally has an impact on the findings. The most common measurement has involved self-assessment as ironic/sarcastic and Rockwell & Theriot (2001), Dress et al. (2008), Bowes & Katz (2011), Milanowicz (2013) and Dauphin (2000) all report that male participants were more likely to self-describe as sarcastic than female participants. In contrast, Adjei & Bosiwah (2015) recently found similar self-reports across gender and, according to Rockwell (2006: 38), Nelms (2002) found that women were more likely to self-report as sarcastic.

Frequency of use has also been addressed through elicitation tasks, for instance Colston & Lee (2004) and Ivanko et al. (2004) asked participants to choose their most likely response from a selection and found that male participants were more likely to select the sarcastic response. However, these gender-correlations have not been supported by other experimental research, either similarly using forced choices (Dress et al. 2008), or using completion tests (Bowes & Katz 2011; Dress et al. 2008). In observational data, Gibbs (2000) compared performance of different types of irony (conceptualised in a very broad sense) in informal conversations and found that three out of four types of irony were more frequent in male speech (the exception was hyperbole). While Boxer (2002) reports that in a case-study by Nelms (2002) the use of sarcasm by eight university professors was distributed fairly equally across gender (2002: 102). Katz et al. (2004) also assert that men use sarcasm twice as

frequently as women but there is no information reporting how this was measured. Thus, the picture is somewhat more fragmented than it first appears.

In terms of expectations of gendered performance, previous research again points towards an association of sarcasm with male behaviour. In experimental conditions, Colston & Lee (2004) reported that speakers of sarcastic utterances were more likely to be assumed to be male. Furthermore, Katz, Piasecka, & Toplak (2001), as reported in Colston (2005 :111), found that the perceived gender of the producer of a sarcastic utterance affected processing by readers, with reading times for texts featuring male producers of sarcasm being lower than for female producers. They also found that this effect was most pronounced when the reader was female. This was interpreted as occurring because ‘sarcasm is more likely to be associated with males than females, comprehension of noncanonical usage is delayed as people attempt to integrate the text they are reading with their stored “knowledge” (stereotypes) of men and women’ (Katz et al. 2004: 187). Indeed, what is not clear, and what this study aims to address, is the extent to which these gender effects are the results of stereotypes or actual gendered tendencies. For instance, Katz et al. (2004: 187, *my italics*) report that ‘when the gender of the speaker is manipulated in a textoid [a short text], the *same* comment is rated as more sarcastic when made by a male than when made by a female’, which suggests that participants are drawing on stereotypes in associating sarcasm with male speakers.

Research has also investigated differences in evaluation according to gender. Female participants in Adjei & Bosiwah (2015) were more likely to evaluate sarcasm as potentially disruptive to relationships. Male participants have been reported to find ironic/sarcastic utterances less critical (Milanowicz 2013), more polite (Ivanko et al. 2004), more humorous (Jorgensen 1996), more enjoyable (Drucker et al. 2014) and more affirmative (Lampert &

Ervin-Tripp 2006) than female participants. In contrast, Dress et al. (2008) elicited definitions of irony and sarcasm and found that female participants were more likely to mention humour as a feature of sarcasm than the male participants. Linked to evaluations, Milanowicz (2013) found that female participants were more likely to report using irony for mockery while male participants were more likely to use irony for amusement and self face enhancement.

3. Issues arising from previous research

Having surveyed previous research reports regarding gender correlations with mock politeness, in this section I move the focus to the methodological practices used in such research and highlight some problematic aspects.

3.1 Blurring of perceptions and practice

One of the notable inconsistencies with previous research into the frequency of irony/sarcasm use, as noted in Bowes & Katz (2011) and Dress et al. (2008), is that there is a mismatch between male perceptions and practice. In both studies, the male participants reported using sarcasm more than the female participants, but did not so do in the elicitation tests. This makes assertions such as Rockwell & Theriot's (2001: 44) that 'results indicated that men were more sarcastic than women' highly problematic as they were not measuring attested *performance*.

Why the discrepancy occurs in this particular context is not clear, but it has long been recognised in sociolinguistics that what people report doing and what they actually do are two quite different things. The variance may be connected to the social value attributed to sarcasm (as shown above, male participants rated sarcasm use more favourably), it may reflect social stereotypes about who uses sarcasm. It may even reflect a male bias to self-report more highly, in other studies male participants also self-reported as using aggression more than the female participants did (discussed in Richardson & Green 2003), and to using

conversational indirectness more (Holtgraves 1997), both of which are of course central to mock politeness. It could be that the elicitation tools do not match the authentic use, we might recall Gibbs (2000) is the only published study that compares production in authentic settings. However, it may also be related to the actual term that was used in these tests, *sarcasm*, as discussed further in the following section and explored in the analysis sections.

3.2 The importance of metalanguage

Another crucial methodological issue is the use of the terms *ironic* and *sarcastic* in tasks presented to participants. For instance, in order to elicit self-assessed reports of sarcasm, Dress et al (2008: 83), following Ivanko et al. (2004), asked the following questions:

- 1) What is the likelihood that you would use sarcasm with someone you just met?
- 2) How sarcastic do you think you are?
- 3) What is the likelihood that you would use sarcasm when insulting someone?
- 4) What is the likelihood that you would use sarcasm with your best friend?

The first point that we might note is the use of the metapragmatic comment *sarcastic/sarcasm* in each of these questions which is likely to mean that participants do not think about the second order concept of sarcasm, that is the scientific construct, but the kinds of contexts in which they would describe a behaviour as *sarcastic*, that is the first order understanding. However, as Creusere (1999) notes, lay and academic uses of *sarcasm* are not the same, and lay uses will be influenced by sociolinguistic variables.

The need to avoid influencing participants through the use of leading first-order terms has been addressed in im/politeness studies, such as Culpeper et al. (2010) who set out to collect reports of impolite (in the academic, second order sense) behaviour. The authors explicitly note that they avoided using 'labels such as "impolite," "rude," "abusive," "aggressive" — because the choice of a particular label may have biased our results toward particular

behaviours and, moreover, we wished to see what labels the informants would choose' (2010: 601). Thus they retrieved a much greater range of behaviours, which could then be classified in a data-driven way. To date, this kind of approach has not been reported in studies of sarcasm and gender, perhaps because, to date, there has not been much research into the full range of first-order labels which may be used to describe the second order construct of sarcasm.

3.3 The search for difference

The third point to which I would like to draw attention is the extent to which previous studies of gender and sarcasm have focussed on *difference*. As I have argued elsewhere (Taylor 2013), this is a more general tendency which limits our potential to fully view any object study, but it appears to be particularly marked in studies of gender in which difference constitutes one of the 3 'D's in studies of language and gender: deficit, dominance and *difference*, as discussed in Baker (2008, 2014). If one sets out to find difference, it is likely that, at some point, it will be found. It is perhaps telling that Colston & Lee (2004: 292, my italics) briefly discuss a series of pilot studies which they carried out and which it appears were not developed further because '[n]one of these studies revealed a gender *difference* in ratings given by participants', and so they go on to describe how they developed the methodology further until they did reveal gender differences. As Baker (2010) has pointed out:

not publishing or sharing such findings can result in what has been called 'bottom drawer syndrome'. For example, imagine that ten sets of researchers, working independently from each other, all build a corpus of Singapore English and compare it to a similar British corpus, looking at the same linguistic feature. In nine cases the researchers find that there are no significant differences, decide that the study is therefore uninteresting and assign the research to the bottom drawer of their filing cabinet rather than publishing

it. However, the tenth researcher does find a difference and publishes the research, resulting in an inaccurate picture of what the general trend is when such a comparison is undertaken.

Baker (2010: 83)

What is occurring in studies of gender and sarcasm is likely to fit this profile very accurately if studies are consistently designed to elicit differences.

4 Corpus-assisted analysis

The analysis showed that the expectations from the literature review were only partially met, as discussed below. The label *sarcastic* was more frequently associated with male behaviours, but the performance of mock politeness was not; other labels were used to describe female mock polite behaviours.

4.1 Combining corpus linguistics and pragmatics

According to Romero-Trillo (2008),

pragmatics and corpus linguistics have not only helped each other in a relationship of mutualism, but, they have also made common cause against the voices that have derided and underestimated the utility of working with real data to elucidate the patterns of language use

Romero-Trillo (2008: 1)

They are, therefore, a combination that is ideally suited to an empiricist approach to linguistics. One possible barrier to corpus pragmatics is that corpus linguistics has often been criticised for neglecting context in the search for quantity (e.g. Widdowson 2004). However, the model which is employed here is grounded in the importance of analysing language in

use, following the Firthian principle that '[w]e must take our facts from speech sequences verbally complete in themselves and operating in contexts of situation which are typical, recurrent, and repeatedly observable' (Firth 1957:35). In order to provide context, forums were used because they allow for retention of most situational context. Furthermore, to provide the thick level of description which is required for pragmatic analysis, the corpus was heavily annotated in what is essentially an additional analytic stage given that, according to Leech, annotation 'can be defined as the practice of adding interpretive linguistic information to a corpus' (Leech 1997: 2). This process is briefly described in Section 4.1.2.

4.1.1 Corpus compilation

The dataset used in this study comes from an online forum which was selected because it allows access to 'everyday' or 'conversational' comments on mock politeness, while retaining much of the context. The forum, from *mumsnet.com*, is UK based and predominantly populated by people presenting as women, which clearly has implications for any discussion of gender because of the gender imbalance in the speakers. By way of illustration of the size, as of January 2015 mumsnet claims to have over 70 million page views and over 14 million visits per month (Mumsnet 2015).

The 61 million token corpus was compiled using the free software BootCat (Baroni and Bernardini 2004), which gathers text from entire webpages using seeds (search words). The search words used here were potential candidates for discussing mock politeness, which had been identified by using terms discussed in the relevant literature and potential synonyms (as identified through the Sketch Engine distributional thesaurus [Rychlý and Kilgarriff 2007]).²

² See Taylor (2015a; 2015b) for the full set of search words.

For additional discussion, the EnTenTen13 corpus was also used which is available through Sketch Engine. This is an English language corpus which was gathered from online texts (Jakubíček et al. 2013) and contains 19,717,205,676 words. The utility of a large reference corpus is that it allows us to move from the relatively small sample of a specific population to a larger sample of a larger population.

4.1.2 Corpus annotation

The corpus was annotated in two phases as part of a larger project (described in Taylor 2015a, not all aspects of the annotation are employed in this paper). In the first annotation phase, I concordanced each search word which could refer to mock politeness (using Wordsmith Tools, Scott 2008) and annotated these metapragmatic labels according to a range of features relating to participation role and evaluation. In the second phase, I read the expanded concordance lines in order to identify what event/behaviour had been evaluated using the metapragmatic comments. The events included both behaviours which occurred within the forum, and behaviours which the participants had experienced outside the forum. These events/behaviours were then annotated for a range of features including gender and im/politeness structures.

For the purposes of this study, I adopt Spencer-Oatey's (2000, 2002, 2008) analytic frame for face and sociality rights. In this frame, face is conceived following Goffman (1967) as 'the positive social value the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact' (1967: 5). In contrast, sociality rights are concerned with an individual's expectations and entitlements regarding their interactions with others (Spencer-Oatey 2008: 13) and, as such, broadly correspond with Brown and Levinson's (1987) concept of negative face. This model has been chosen for three main reasons: first, because it breaks the concept of face into more detail than other models, thus accounting for social and group identities, which had practical advantages at the analytic

stage. Second, because it was developed in order to discuss intercultural communication and therefore is potentially better suited for a cross-cultural analysis (e.g. as used in García 2010). Third, because it has been successfully applied to the analysis of impoliteness (e.g. Culpeper et al. 2010; Cashman 2006, 2008).

4.1.2 Corpus tools

In the corpus analysis in this paper, I mainly make use of concordances and collocates.

Concordances are a way of looking for patterns in the text because they provide a kind of ‘boiled down’ (Scott & Tribble 2006: 6) sample of the text by presenting all occurrences of a search term within a limited amount of context (the amount is set by the researcher) on either side. The great difference between reading a text and a concordance is that concordances are read vertically rather than horizontally. The collocate function in any corpus linguistic software further reduces the information so that the researcher is left with just single words that co-occur with a search word. These collocates ‘can be useful in revealing how meaning is acquired through repeated uses of language, as certain concepts become inextricably linked over time’ (Baker 2014: 13).

In this study, I use two different sets of software for sorting the collocates and the aim of these is to increase the opportunities for pattern perception. The first tool is GraphColl (Brezina et al. 2015, applied in Baker & McEnery 2015) which offers a visualisation of the collocational network (Phillips 1985), that is the way that collocates link not just to the node, but also to one another. The importance of visualising the collocational network is that it allows us to see the company that a word is keeping (Firth 1957) but, crucially, it places that company in context. As Brezina et al. (2015: 141) state, ‘[c]ollocates of words do not occur in isolation, but are part of a complex network of semantic relationships which ultimately reveals their meaning and the semantic structure of a text or corpus’. Furthermore, because the networks can be displayed simultaneously, it is also possible that we may be able to

identify the absent (Taylor 2012; Partington 2014) by noting which items collocate with other nodes and not with the node under study at that moment. The GraphColl tool is used in Section 5.2 to present an overview of the connections between the search terms and gendered collocates.

The second collocation tool used here is the Sketch Engine thesaurus (Rychlý and Kilgarriff 2007) which works by identifying the collocational profile for a search word and then in the second stage identifying other words which share similar collocates. So, for instance, if one were to enter *cold* as a search word, one ‘synonym’ which is highly likely to be suggested in the distributional thesaurus is *hot* because antonyms usually share very similar lexical environments. In this study, the thesaurus is used to see what other items share similar environments to *sarcastic* and *bitchy* (Section 4.4.1).

4.2 Correlations between gender and performance of mock politeness

In this stage, the corpus annotation was used to identify the behaviours indicated by the metapragmatic labels (as discussed above) in which the gender of the person who performed the behaviour was specified. To avoid any imbalance due to the fact that this forum is dominated by participants presenting as women, the instances in which the speaker was describing their own behaviour, or that of an interlocutor in the forum, were not included.

A total of 563 such instances were identified in the corpus and of these 33% of performers were male and 67% were female. This would suggest that when these kinds of behaviours are discussed by users of this forum, the performer is more likely to be female, in contrast with the previous literature.

When the occurrences are narrowed down to those descriptions where the verbal behaviour was fully recorded and it could be defined as mock polite, the weighting remained largely similar with 19 (59%) attributed to female speakers and 13 (41%) to male speakers. However,

this highly specific final sample is very small and therefore the results cannot be taken as discrediting the frequency hypothesis with reference to mock politeness. For future research, this sample suggests that there is a discrepancy between the gender expectations from the previous literature and the observed performance of mock politeness, that is between perceptions and practice.

4.3 Correlations between gender and metapragmatic labels of mock politeness

Given that the analysis above found no weighting towards male performance of mock politeness, the next hypothesis that was investigated was whether any gender effect is related to the metapragmatic labels used to describe such behaviours. Therefore, Figure 1 visually displays the metapragmatic labels which I had previously found to indicate mock politeness and all their collocates which were gendered lexical items that referred to people. As can be seen, many of these are abbreviations (e.g. *mil* for *mother-in-law*) and this usage for referring to family members is typical of the forum discourse. In the GraphColl visualisation, the length of the line linking the search word and any given collocate reflects the strength of collocation between those items. The items in red are the nodes which are entered manually, and the items in purple are the collocates.

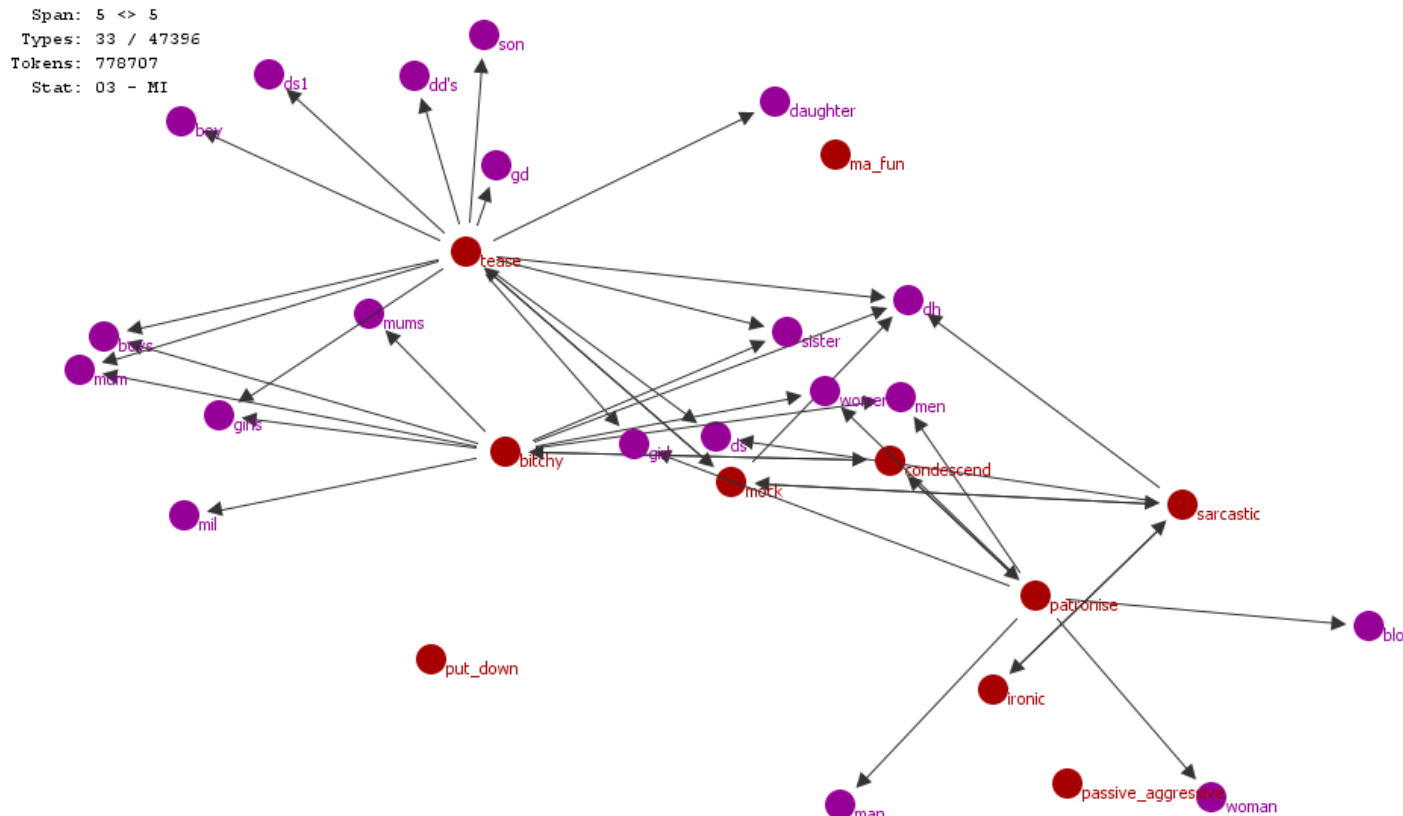


Figure 1. Collocates of the metapragmatic comments which refer to gendered noun

The two metapragmatic labels which emerge as gendered are *bitchy* (collocating either *mil* [mother-in-law], *girls*, *mum*, *women*, *sister*) and *sarcastic* (collocating with *dh*[dear husband], *ds* [dear son]).

In order to explore this with more accuracy regarding the subject of the metapragmatic labels, the behaviours described by the metapragmatic labels were all analysed to identify the gender of the performer, that is the person who was described as being *sarcastic* etc. As Figure 2 shows, there were gender preferences for the different labels.³

³ Only those instances where the behaviour of a third person was being described were counted in this stage because this mean that the gender was more likely to be specified and to avoid bias from the fact that the first and second person references would be overwhelmingly female in this particular corpus

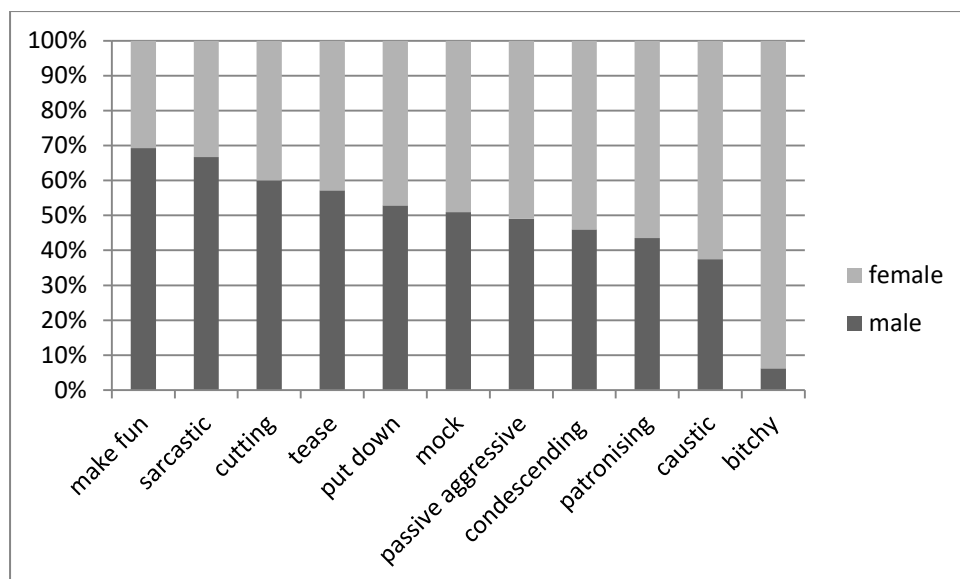


Figure 2. Distribution of male/female performance of behaviours

Once again, *bitchy* was, by far, the most gendered metapragmatic label of those examined. In terms of frequency difference, MAKE FUN was the label most strongly associated with male behaviour, while in terms of statistical significance (measured using log-likelihood), *sarcastic* was most strongly associated with male behaviour. This finding corroborates the pattern indicated by the collocational profile and fits expectations from the literature on sarcasm and gender but does not match up well with the findings from Section 4.2.

The detailed analysis also showed that both *sarcastic* and *bitchy* were used frequently to describe children's behaviours, as illustrated in examples (3) and (4), as well as adult behaviours.

(3) my son is 11, an only child and in turns loving, affectionate & demonstrative and hateful, rude, **sarcastic** and aggressive. [...] Being so verbally articulate means he can be very cruel & sarcastic too, which really hurts me.

(4) i my dd is having a lot of trouble with **bitchy** girls in her class. Just general put downs and nasty remarks but fairly constant and the more it upsets her the more they do it.

Overall, 47% of the producers of *bitchy* behaviours (based on a sample of 200 concordances) were school-age female children and the person being described as *sarcastic* was most frequently the speaker's (ex)partner (24% of occurrences) or son (22%).

Given that both *sarcastic* and *bitchy* have been shown to be used for description of mock polite behaviour, and given the apparent similarity in use in this dataset, the question that is raised is whether these two terms actually refer to different behaviours or whether they are gendered descriptions for the same behaviours, much in the way that *bossy* and *assertive* may be seen to operate (see, for instance, Subtirelu 2014 for discussion of sexist use of *bossy*), and this question is addressed in the following section.

4.4 Bitchy and sarcastic: Treated as same or different? Evidence from EnTenTen 13

4.4.1 Collocational profiles of bitchy and sarcastic in a larger corpus

For the analysis in this section, I step out of the controlled domain of the forum corpus to EnTenTen13 a much larger English language corpus made up of online texts. Using the Sketch Engine thesaurus function (described in Section 4.1.2), it is possible to use the collocates, i.e. those items that relate to the node in a syntagmatic relationship, to identify items which potentially relate to the node paradigmatically. The findings for *bitchy* and *sarcastic* are displayed visually in Figures 3 and 4, and in table format in Table 2. In the visualisation of the collocates, the greater the strength of the collocation, the larger the word appears in the figure.



Figure 3. Sketch Engine Thesaurus output for *bitchy*



Figure 4. Sketch Engine Thesaurus output for *sarcastic*

As can be seen from the visualisation there are a number of items which appear as possible ‘synonyms’ according to this distributional thesaurus for both *bitchy* and *sarcastic*, and each term occurs in the other’s list too. This suggests that the two items do have a degree of ‘interchangeability’. However, where the two lexical items *bitchy* and *sarcastic* seem to differ is in the evaluations, and this information is highlighted in Table 2. While they both share a large number of negative items, *bitchy* has, in addition an additional set of negative items,

while *sarcastic* has a set of items that are clearly favourably evaluating the behaviours, in particular with reference to humour value. There is also a set which I have not categorised as either positive or negative, but which clearly have potential to evaluate favourably, in particular with reference to disagreement. For instance *defiant*, *provocative* and *rebellious* occur in the ‘*sarcastic* only’ column. In contrast, the items which indicate power struggles in the ‘*bitchy* only’ column focus more on generic personality traits rather than circumstantial processes, for instance *overbearing* and *demanding*.

Table 2. Items from Sketch Engine thesaurus for *bitchy* and *sarcastic*.

	shared items	<i>bitchy</i> only	<i>sarcastic</i> only
Negative evaluation	argumentative, arrogant,	bossy, bratty, catty,	angry, bitter, brash,
	childish, cocky,	conceited, controlling,	contemptuous, cruel,
	condescending,	cranky, demanding,	insensitive, silly, sly,
	confrontational, cynical,	egotistical, fussy,	smug, stubborn, vulgar,
	dismissive, disrespectful,	overbearing, petulant,	
	grumpy, hateful,	prissy, pushy, resentful,	
	impatient, insulting,	self-absorbed, self-centered,	
	judgmental,	sleazy, slutty, smutty,	
	manipulative, mean-	haughty, snobbish, snobby,	
	spirited, nasty,	snotty, spoiled,	
	obnoxious, opinionated,	temperamental, ungrateful,	
	rude, selfish, snarky,	unkind, uptight, vindictive,	
	snide, spiteful,	whiny	
Positive evaluation	sassy	saucy	amusing, clever, comical,
			funny, hilarious, humorous, playful, witty

naughty, raunchy

caustic, cheeky, defiant,
edgy, goofy, irreverent,
mischievous, wry,
tongue-in-cheek,
provocative, quirky,
rebellious, sardonic,
satirical, ironic

What these findings suggest is that *bitchy* and *sarcastic* overlap significantly, as shown in the large number of shared collocates, and the fact that each occurs in the other's list of 'synonyms'. However, in this 19 billion word corpus, they drift apart in terms of evaluation which is why the gendered use of these items to describe similar, or indeed the same kind of behaviour, indicates sexist attitudes.

4.4.2 Co-occurrences of *sarcastic* and *bitchy*

In the next stage, I examine overt discussion of being *bitchy* and *sarcastic*. In the forum corpus, there were three co-occurrences of *bitch** and *sarcas** within a 10 L/R span and in each of these they were used in a way that suggested the speakers saw them as similar behaviours, as illustrated in (5).

- (5) Haven't worked out which one Charlie State is but haven't liked Susanna Reid since she was unnecessarily **bitchy/sarcastic** to a fired Apprentice contestant.

The search was expanded once again to the much larger enTenTen13 corpus which displayed a similar pattern. In the majority of the concordance lines (55%), *bitchy* and *sarcastic* formed part of the same noun phrase, and this pattern is illustrated in the sample concordances in Table 3.

Table 3. Concordance lines showing *bitch** followed by *sarcas** in R1 position.

I spared this woman from my	bitchy	sarcasm . But where I come fr
too! what a perfect name! /	bitchy	sarcasm . to top it off, the
even notice that for all my	bitchy	sarcasm I'm guilty of writing
not me. What's with all the	bitchy	sarcasm that is being direct
y from here with your nasty	bitch	sarcasm until you go more in
ed ones. I balance wit and	bitchy	sarcasm with a warm, caring n
an hour with her genuine,	bitchy	sarcastic humour that left ev
feels , he'll throw cunty,	bitchy	, sarcastic comments your wa
luck at all. Tara is her	bitchy	, sarcastic friend who might
caught in Adam's constant	bitchy	, sarcastic lines." Nick is c
ted, you come in with your	bitchy	, sarcastic little comments..
out of 10 we bite back the	bitchy	/ sarcastic comments that run

The next most frequent pattern (39%) was that *bitch** and *sarcastic** formed part of the same descriptive string, as shown in Table 4.

Table 4. Concordances lines showing *bitch** and *sarcas** linked by *and*

absence here. Irritation,	bitchiness	and sarcasm is at an all
</p><p> I kind of find your	bitching	and sarcasm on Cornish to
writing. Sometimes I'm	bitchy	and sarcastic (that's
I know a few) can be quite	bitchy	and sarcastic , and I
shown on here. While I am	bitchy	and sarcastic , I'm also
any less cooperative and	bitchy	and sarcastic around them
be inclined to be even more	bitchy	and sarcastic than usual.
to be very sarcastic and	bitchy	- so keeping the tone
be yourself (sarcastic and	bitchy) and not all "oh, do you
s: Leanne - sarcastic and	bitchy	, Tina - always on a die
without being sarcastic and	bitchy	. </p><p> The show is aw
s it when I'm sarcastic and	bitchy	. So Jess, this is for yo
ad Grace is sarcastic and	bitchy	? Sweet as southern pecan
ay I've been sarcastic and	bitchy	and picking at every
't sarcasm , cockiness, and	bitchiness	par for the course for t
and is really sarcastic and	bitchy	the whole time. There's
g completely sarcastic and	bitchy	to him (and i consider t
People are sarcastic and	bitchy	to your face and behind y
were loud, sarcastic , and	bitchy	was almost as rewarding a

In the remaining occurrences, the two items were not linked in a meaningful unit, for instance one term might describe one participant and the other another participant. There was only one

instance in the corpus in which being *sarcastic* and being *bitchy* were opposed, and this is presented in example (6).

(6) I'm **sarcastic** without being **bitchy**, pointed without being mean-spirited.

From this brief analysis of how *bitchy* and *sarcastic* co-occur in the corpus, it generally does not appear that the two items are being distinguished. They are seen as similar or quasi-synonymous actions in these two datasets. Thus, once again have evidence that they are considered interchangeable and this strengthens the hypothesis that the choice of one or the other relates to the evaluation that is being offered of the performer, with the more negative lexical item being applied to women and the more favourable item being applied to men.

4.5 Analysis of mock polite behaviours

In the next phase, I examine the annotated behaviours which were labelled as *sarcastic* and *bitchy* in the forum corpus to explore in more detail to what extent they really are labels for the same or different behaviours. The analysis above in the forum corpus and in the EnTenTen13 corpus has already shown that both labels share a similar collocational profile but that the evaluation accompanying the *bitchy* label is more unfavourable compared to that for *sarcastic*.

Like all the labels examined in the wider study of mock politeness, in the forum corpus *bitchy* and *sarcastic* were consistently used in order to express a negative opinion about someone/something, as anticipated from research into irony and sarcasm in particular (see, inter alia, Wilson 2013). They were also both used to refer to mock polite behaviours, although the proportions of actions which performed mock politeness varied: out of 122 *bitchy* behaviours, 17% involved mock politeness, compared to 53% of the 70 behaviours located for *sarcastic*. Thus, we can see that there are some differences in what kind of pragmatic event they are describing and this too may be a variable in the choice of label.

To explore the shared features further, I narrowed down the focus to those events which involved mock politeness, as illustrated in (7) and (8) to see if they were, in any way, structurally different.

(7) course, i ended up telling a couple of **bitchy** customers, because I was lying down on the floor because I felt sick as shit, and this random woman came in and snottily said "oh! having a lie-down are we?"

"yes, I replied, I'm pregnant and feel sick".

(8) DH is happy for me to happy at home BUT he moans at me if the house isn't tidy or I get behind. He is **sarcastic** and says things like "I know you're really busy" or "if you could spare the time"....

I return to these two examples in the discussion below which focusses on the structures of mismatch in the behaviours.

4.5.1 The aspects which are mismatched: Sociality rights or face?

In both (7) and (8), the mock polite behaviour involves the speaker ostensibly paying attention to some aspect of sociality rights in order to express an unfavourable evaluation of the target and attack some aspect of face. Indeed, this was the most frequent ostensibly polite move for behaviours described as both *sarcastic* and *bitchy*, as displayed in Figure 5.

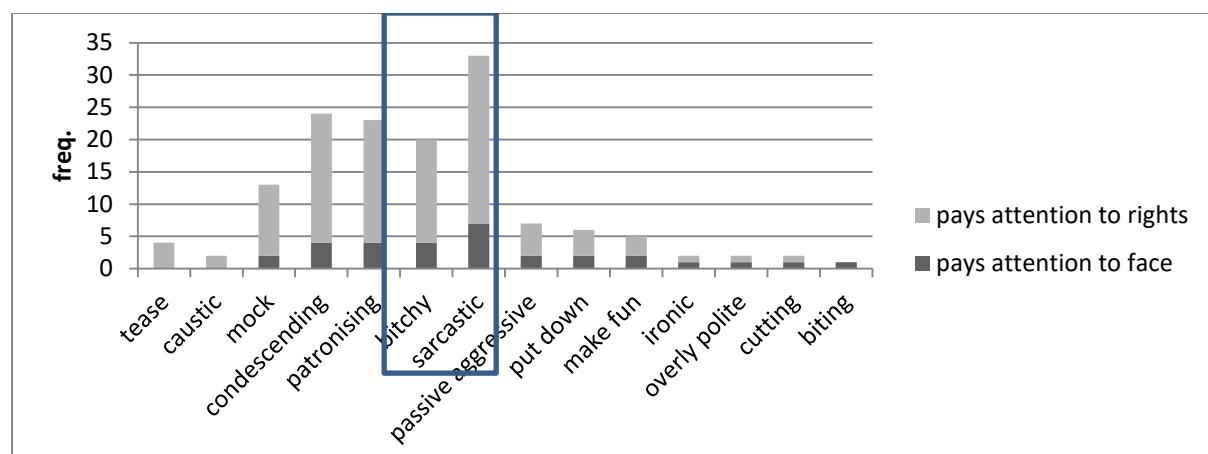


Figure 5. Mock polite behaviours classified according to surface politeness

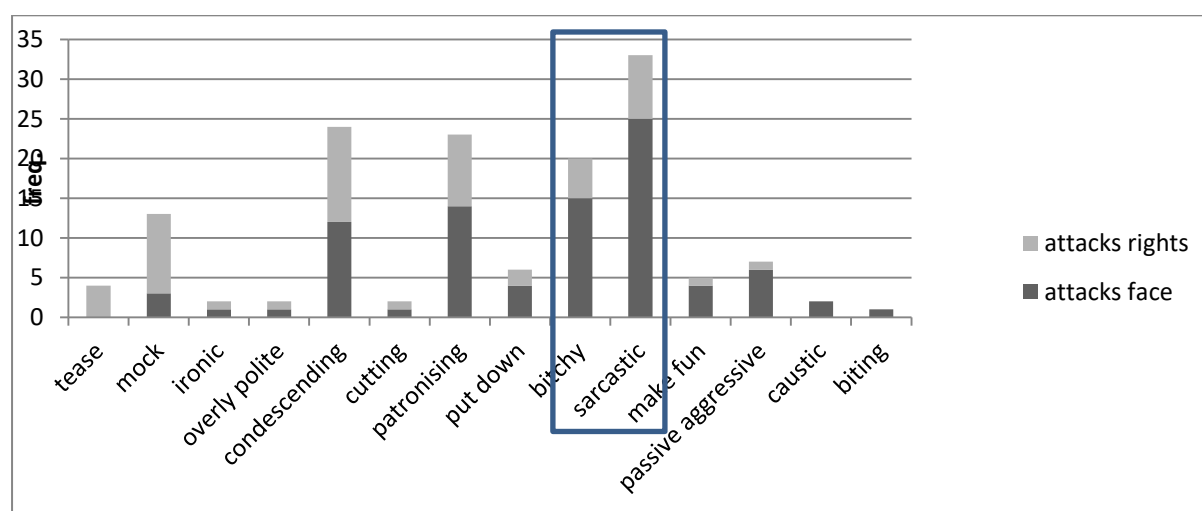


Figure 6. Mock polite behaviours classified according to aspect attacked

The two figures display the data for all the metapragmatic labels which were analysed in the wider study because this provides a sense of perspective for the analysis of *bitchy* and *sarcastic* in particular. One of the risks of comparing two items without a wider backdrop is that differences are likely to be accentuated and this may be countered by examining a range of items. The labels in Figure 5 are ordered from those which have the greatest proportion addressing sociality rights to those which have the greatest proportion addressing face. The bars are not shown as percentages because this would cloud the significant differences in frequency. As highlighted with a rectangular shape, the behaviours labelled as *sarcastic* and *bitchy* cluster close together. A similar clustering is also seen in Figure 6, which shows which aspect is attacked in the mock polite behaviours described using the different metapragmatic labels. Thus it appears that the behaviours labelled as *sarcastic* and *bitchy* are structurally similar in terms of which aspects are mismatched.

4.5.2 The location of the mismatch: Internal or external?

Another important aspect for the structure of mock polite utterances is the *location* of the mismatch, as described in the introduction. In examples (7) and (8) above, there was no overt

clash of im/politeness evaluations in the co-text and this was typical of the behaviours labelled as *bitchy* and *sarcastic*, as can be seen from Figure 7.

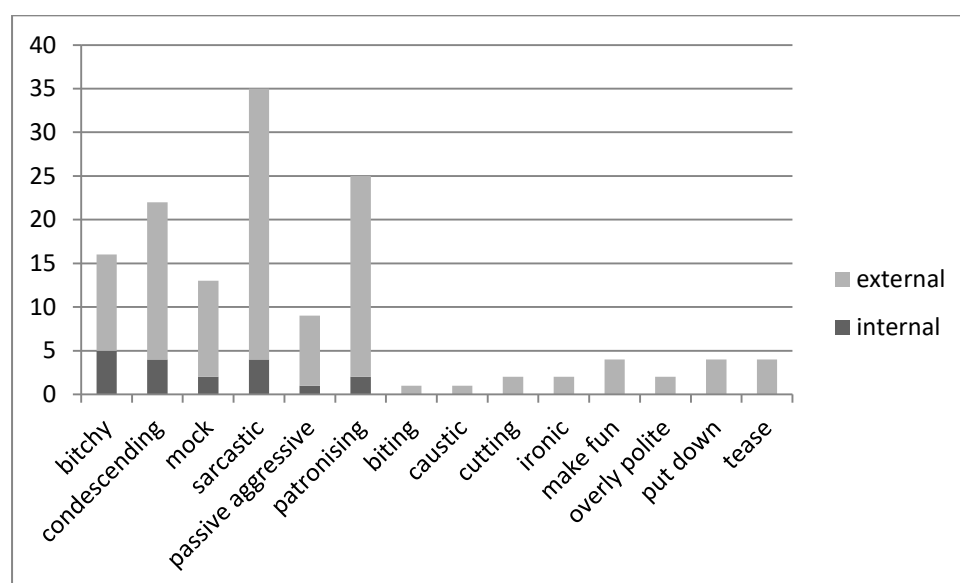


Figure 7. Mock polite behaviours classified according to location of mismatch

The majority of mock polite behaviours involved an external mismatch for both *bitchy* (60%) and *sarcastic* (84%) although, as seen in the figure, this clearly was a stronger pattern for *sarcastic*. In the case of *bitchy*, there was a high proportion of internal verbal mismatch, as illustrated in example (9), although analyses of larger datasets would be needed to fully corroborate this.

(9) The best was when I got married, the comments ranged from "well your dress was nice considering it was from the high street", to "well that restaurant is ok for you but it's not Michelin starred is it. I wouldn't eat there" and "your flowers were good considering you did them yourself". At the time I just dismissed them but as time has gone on there have been so many **bitchy** comments that I could write a book!

In (9) we can see that each of the comments involves a garden path type structure, in which the ostensible compliment is replaced by face attack. So once again, we observe a general

pattern of similarity with some variation, in this case with *bitchy* being used more frequently to describe an internal mismatch of im/politeness. From the analysis so far, it appears that when the two metapragmatic labels describe mock polite utterances in this dataset, the pragmatic structure of the behaviours are similar.

5 Findings from survey data

In the final stage in this project, I move from corpus analysis to elicitation of data by employing samples of the corpus data as stimuli in a survey. The aim of this stage is to further test and explore the hypothesis that these are gendered labels used to describe similar behaviours.

5.1 Survey methodology

Participants were recruited through the Prolific Academic survey website and the survey was completed by 455 people. To try and reduce further variation, the survey was only distributed to members who, when registering with the website, had declared that their first language was English and that they were UK residents. However, there was a gender imbalance in the participants as 277 identified as female, 175 as male and 3 did not identify with either of these labels. This was also an issue in the pilot study and, therefore, in the sections of the discussion where this is salient I compare rankings or relative frequencies of use.

Each participant in the survey was presented with two biodata questions, relating to age and gender identification, and two shorts texts from which either the word *bitchy* or *sarcastic* had been removed, one of these is shown below for illustration.

He's constantly _____ with me. If I say to him something innocent and NORMAL like "oo the bank is looking a bit poorly this month" he'll immediately switch to arsehole mode and start saying "oh - ok well I won't eat this month, will that make you feel better about

it?"

The stimuli were taken from the corpus examples to ensure that participants were being presented with authentic data. For each of the four variants, as summarised in Table 1, the participants saw two texts and were asked to choose just one word which complete both. This was done so that, as much as possible they were looking for metapragmatic labels which could fit all contexts and were less likely to be distracted by features of the single example. In an earlier pilot study (discussed in Taylor 2015c), participants were presented with four texts and asked to choose just one word which they reported to be very difficult. The four different variables are summarised in Table 1.⁴

Table 1. Summary of four different variants distributed to participants.

A1. 2 texts with blank where <i>bitchy</i> was originally used. Person performing the behaviour is female.	B1. 2 texts with blank where <i>bitchy</i> was originally used. Person performing the behaviour has been modified to male.
C1. 2 texts with blank where <i>sarcastic</i> was originally used. Person performing the behaviour is male.	C2. 2 texts with blank where <i>sarcastic</i> was originally used. Person performing the behaviour has been modified to female.

Furthermore, three sets of each variable were delivered so that skewing by any particular pair could be identified. This means that, in total, there were 12 different test versions corresponding to the variations shown in Table 1, plus one additional variation which was less central to the study and involved an instance in which a male speaker positioned as being *gay* and *gok*-like (referring to a UK television celebrity) was described as *bitchy*. Each participant only saw one of the thirteen test version and these were delivered to participants

⁴ The question about age was used to determine which version each participant was given, so for instance in second test version which had 13 variants, participants responding that they were 16, 29, 42, 55, 68, 81 saw version 1, participants responding that they were 17, 30, 43, 56, 69, 82 saw version 2, and so on.

on a quasi-random basis, and the variations. As the analysis showed that the results for each set of three were similar, they have been conflated in the discussion below.

Although a number of modifications were made based on the pilot study, there are still some weaknesses which should be kept in mind when interpreting the findings. The first is that this kind of study relies on participants being truthful when declaring biodata information.

Second, it was not possible to recruit equal numbers of male and female respondents, a factor which affected the pilot study too. Third, participants may be reluctant to use a word that they considered taboo, such as *bitchy*, in the context of a survey. Despite these limitations, the tentative integration of other research methods has been valuable in testing more precisely the effects of gender variation and in future research is likely that that such multi-method approaches can provide a more complete picture of the data.

5.2 Gender effects on lexical choices

Tables 5 and 6 summarise the substitutes which were suggested by at least two participants.

Table 5. Substitutes for *bitchy*

bitchy_female actor	freq.	bitchy_male actor	freq.
rude	13	rude	25
bitchy	12	random	12
sarcastic	12	sarcastic	12
mean	7	sly	6
nasty	6	joke	5
snide	6	snide	5
silly	5	inappropriate	3
stupid	5	insulting	3
random	4	nasty	3
inappropriate	3	stupid	3
cruel	2	dumb	2
cutting	2	silly	2
ignorant	2		
insulting	2		
jealous	2		
petty	2		

Starting with the substitutes for *bitchy*, shown in Table 5, when the person being described was female, the term *bitchy* was used to complete the text whereas this was only suggested once when the person being described is male. Furthermore, in the male variant we see the only favourably evaluated term, *joke*, being used, which suggests that these behaviours were evaluated less harshly by some participants when the person doing the action was male. This may also be supported by the high ranking of *mean* in the list describing female behaviour, but which is absent from the male list. Similarly, *random* ranks higher in the list describing male behaviour suggesting a ‘downgrading’ of the offence, a pattern which was seen in the pilot data too.

In both variants *sarcastic* was one of the most frequent substitutes offered which again suggests the similarity in the mock polite behaviours labelled as *bitchy* and *sarcastic*. Another similarity is that in both sets we see *rude* as the highest ranking item, emphasising the impolite evaluation and *snide* which also indicates mock politeness.

Regarding the effects of the gender of the person completing the survey, female survey participants were more likely to describe the female speaker as *sarcastic* than *bitchy*. In contrast, male respondents labelled the behaviour performed by a female twice as frequently as *bitchy* than *sarcastic*. This suggests that the gendering of the items is even stronger amongst the male participants than the female participants. The use of *joke* was split equally across male and female test participants and therefore does not indicate that the use is dependent on the gender of the person completing the task. Both of these findings reflect those of the pilot study.

In the single text which had a male speaker who was described repeatedly as *gay*, the suggestions to fill the gap left by *bitchy* were: *bitchy* (3), *mean* (3), *excited*, *grumpy*, *objective*, *picky*.

Table 6 shows the results for the texts which originally had *sarcastic* in the description.

Table 6. Substitutes for *sarcastic*

sarcastic_female actor	freq.	sarcastic_male actor	freq.
sarcastic	27	sarcastic	34
annoyed	6	grumpy	5
loud	6	aggressive	4
condescending	5	annoying	4
angry	4	condescending	4
mocking	4	patronising	4
moody	4	angry	3
unreasonable	4	loud	3
argumentative	3	mocking	3
arsey	3	annoyed	2
frustrated	3	impatient	2
grumpy	3	moody	2
patronising	3	nasty	2
defensive	2	passive-aggressive	2
irritable	2	pathetic	2
pathetic	2	sad	2
rude	2	stroppy	2
		whiney	2

In the substitutes for *sarcastic* we see that in both variants the first choice was much more decisive with *sarcastic* accounting for 22% of all completions for the female variant and 31% of the male variant and then a large drop in frequency before the second highest ranked item. Unlike the pilot study, the term *bitchy* was only suggested once for the female variant in this set and therefore it seems the overlap is not bi-directional; that is *sarcastic* may be suggested to complete *bitchy* sentences but not vice-versa. It is also noticeable that *rude* was ranked lower in these sets compared to those for gaps left by *bitchy* and, in both sets, there are a

large number of items which indicate mock politeness in particular, such as *condescending*, *mocking* and *patronising* which shows how these terms describe similar behaviours. Higher frequency items which were not shared across the two sets include *unreasonable*, *argumentative*, *arsey* and *frustrated* for describing a female speaker and *aggressive* and *annoying* to describe male speakers. In this case, it does not seem that there is the same effect of ‘downgrading’ the offence when performed by a male speaker. Nor were there any observable effects of the gender of the person completing the survey on the descriptions of male/female behaviour. One difference that did emerge was that only the female participants used the terms *angry* and *moody* (seen in Table 6), but they used them to describe both male and female behaviour, so it was not a difference of interpretation, so much as these items apparently being gendered in terms of who uses them.

6 Conclusions

To summarise, the empirical observations of behaviours in the annotated corpus did not reveal any evidence that mock politeness itself is a male activity, contrasting with conclusions put forward in previous research on sarcasm. However, it was clear that the metapragmatic labels which are applied to describe mock polite behaviours are gendered. The analysis consistently indicated that in both the corpora used here *bitchy* and *sarcastic* have a relatively high degree of interchangeability in terms of *what* they may describe, in particular when they describe mock polite behaviours, but that they are gendered in terms of *who* they may describe. This finding helps to explain discrepancies raised in previous research, for instance Dress et al.’s (2008: 81-82) finding that the male participants in their study ‘reported using sarcasm more often than the females [...] However, the male participants were no more likely to provide sarcastic completions than females in the free response task, and they did not choose ironic completions more often in the forced choice task utterances in experimental

conditions'. As discussed in Section 3, this discrepancy has been noted in previous research, but had been interpreted as reflecting stereotypes that men perform sarcasm (in the second-order sense) more than women, not that they are just more likely to be labelled as *sarcastic*. The findings are important from a methodological point of view because they show that the use of the metapragmatic labels *sarcastic* or *sarcasm* during research into the academic (second order) concept of sarcasm is likely to skew the findings because a) these are not the only items which can describe the second-order concept of sarcasm and b) the first-order understanding of *sarcastic* is gendered and so it is more likely to be associated with males irrespective of actual behaviours.

Furthermore, the collocation analysis confirmed that *bitchy* has a more negative semantic prosody than *sarcastic*. This is not, in itself surprising, but it suggests that, when the behaviours are the same and the choice of metapragmatic label is gendered, females are being judged more unfavourably than males. This kind of pattern was also indicated in the survey data, for instance where participants suggested *joke* to gap-fill spaces left by *bitchy* when the person being described was male and never did so when the person being described was female. This points towards the underlying impact of sexism in society and the greater censure applied to female behaviour. Furthermore, it is also important to note that the data from the corpus and the survey shows that these sexist evaluations are applied by both men and women.

Regarding limitations, the results presented here were obtained from a specific UK-based sample and the main dataset contains mostly female participants. However, the fact that the findings from the corpus analysis about the gendered use of the metapragmatic labels is reflected in the survey data suggests that these evaluations are not exclusively female nor exclusive to the particular forum used. Thus, further research to investigate whether these

terms are gendered among other speech communities and in other varieties of English seem warranted. The identification of usage in one population is a brick in the wall of identifying general usage.

References

- Adjei, L. N. and Bosiwah, L. (2015). The use of indirect strategies among university students in Ghana: A case study of University of Cape Coast. *International Journal of Languages and Linguistics* 3: 90-101.
- Baker, P. (2008). *Sexed Texts: Language, Gender and Sexuality*. London: Equinox.
- Baker, P. (2010). *Sociolinguistics and Corpus Linguistics*. Edinburgh: EUP
- Baker, P. (2014). *Using Corpora to Analyze Gender*. London & New York: Bloomsbury.
- Baker, P. and McEnery, T. (2015). Who benefits when discourse gets democratised? Analysing a Twitter corpus around the British Benefits Street debate. In P. Baker & T. Mcenery (eds.) *Corpora and Discourse Studies: Integrating Discourse and Corpora* 244-265. Basingstoke: Palgrave Macmillan.
- Baroni, M. and S. Bernardini. (2004). BootCaT: Bootstrapping corpora and terms from the web. *Proceedings of LREC 2004*. Retrieved on 26 January 2016 from clic.cimec.unitn.it/marco/publications/lrec2004/bootcat_lrec_2004.pdf
- Bowes, A. and Katz, A. (2011). When sarcasm stings. *Discourse Processes* 48: 215-236.
- Boxer, D. (2002). *Applying Sociolinguistics: Domains and Face-to-Face Interaction*. Amsterdam: John Benjamins.
- Brezina, V., McEnery, T. and Wattam, S. (2015). Collocations in context: A new perspective on collocation networks. *International Journal of Corpus Linguistics* 20: 139-173.
- Brown, P. and Levinson, S.C. (1987). *Politeness: Some Universals in Language Usage*, Cambridge: Cambridge University Press.

- Cashman, H. R. (2006). Impoliteness in children's interactions in a Spanish/English bilingual community of practice. *Journal of Politeness Research* 2: 217-246.
- Cashman, H.R. (2008). 'You're screwed either way': An exploration of code-switching, impoliteness and power. In D. Bousfield and M. Locher (eds) *Impoliteness in Language* 225-279. Berlin: Mouton de Gruyter.
- Colston, H.L., (2005). Social and cultural influences on figurative and indirect language. In H.L. Colston and A.N. Katz (eds.) *Figurative Language Comprehension: Social and Cultural Influences* 99-130. Mahwah: Lawrence Erlbaum.
- Colston, H. L. and Lee, S. Y. (2004). Gender differences in verbal irony use. *Metaphor and Symbol* 19: 289-306.
- Creusere, M. A. (1999). Theories of adults' understanding and use of irony and sarcasm: Applications to and evidence from research with children. *Developmental Review* 19: 213-262.
- Culpeper, J. (1996). Towards an anatomy of impoliteness. *Journal of Pragmatics* 25: 349-367.
- Culpeper, J. (2005). Impoliteness and entertainment in the television quiz show: *The Weakest Link*, *Journal of Politeness Research* 1: 35-72.
- Culpeper, J. (2011). *Impoliteness: Using Language to Cause Offence*. Cambridge: Cambridge University Press.
- Culpeper, J., Bousfield, D. and Wichmann, A. (2003) Impoliteness revisited: With special reference to dynamic and prosodic aspects, *Journal of Pragmatics* 35: 1545-1579.

- Culpeper, J., Marti, L., Mei, M., Nevala, M. and Schauer, G. (2010). Cross-cultural variation in the perception of impoliteness: A study of impoliteness events reported by students in England, China, Finland, Germany and Turkey. *Intercultural Pragmatics* 7: 597-624.
- Dauphin, V. 2000. Sarcasm in relationships. Unpublished manuscript, University of Pennsylvania. Retrieved from:
<http://ccat.sas.upenn.edu/plc/communication/valerie.htm>
- Dress, M.L., Kreuz, R.J., Link, K.E. and Caucci, G.M. (2008). Regional variation in the use of sarcasm. *Journal of Language and Social Psychology* 27: 71-85.
- Drucker, A., Fein, O., Bergerbest, D. and Giora, R. (2014). On sarcasm, social awareness, and gender. *Humor* 27: 551-573.
- Eelen, G. (2001). *A Critique of Politeness Theories*. Manchester: St Jermome Publishing.
- Firth, J.R. (1957). *Papers in Linguistics, 1934-1951*. Oxford: Oxford University Press.
- García, C. (2010). ‘Cuenta conmigo’: The expression of sympathy by Peruvian Spanish speakers. *Journal of Pragmatics* 42: 408–425.
- Gibbs, R. W. (2000). Irony in talk among friends. *Metaphor & Symbol* 15: 5-27.
- Goffman, E. (1967). *Interaction Ritual: Essays on Face-to-Face Behaviour*. New York: Pantheon Books.
- Holtgraves, T. (1997). Styles of language use: Individual and cultural variability in conversational indirectness. *Journal of Personality and Social Psychology* 73: 624-637.

- Ivanko, S. L., Pexman, P. M. and Olineck, K. M. (2004). How sarcastic are you? Individual differences and verbal irony. *Journal of Language and Social Psychology* 23: 244-271.
- Jakubíček, M., Kilgarrieff, A., Kovář, V., Rychlý, P. and Suchomel, V. (2013, July). *The TenTen Corpus Family*. Paper presented at Corpus Linguistics Conference 2013, Lancaster.
- Jorgensen, J. (1996). The functions of sarcastic irony in speech. *Journal of Pragmatics* 26: 613-634.
- Katz, A., Piasecka, I. and Toplak, M. (2001). Comprehending the sarcastic comments of males and females. In *Poster presented at the 42nd annual meeting of the Psychonomic Society, Orlando, FL*.
- Katz, A. N., Blasko, D.G. and Kazmerski, V.A. (2004). Saying What You Don't Mean: Social Influences on Sarcastic Language Processing. *Current Directions in Psychological Science* 13: 186-189.
- Kreuz, R. and Glucksberg, S. (1989). How to be sarcastic: the echoic reminder theory of verbal irony. *Journal of Experimental Psychology* 8: 374-386.
- Lampert, M. D., and Ervin-Tripp, S. M. (2006). Risky laughter: Teasing and self-directed joking among male and female friends. *Journal of Pragmatics* 38: 51-72.
- Leech, G. (1983). *The Principles of Pragmatics*. London & New York: Longman.
- Leech, G. (1997). Introducing corpus annotation. In R. Garside, G. Leech and A. McEnery (eds.) *Corpus Annotation: Linguistic Information from Computer Text Corpora* 1-18. London: Longman.

- Leech, G. (2014). *The Pragmatics of Politeness*. Oxford: OUP.
- Locher, M. A. and Watts, R. J. (2005). Politeness theory and relational work, *Journal of Politeness Research* 1: 9-33.
- Milanowicz, A. (2013). Irony as a Means of Perception Through Communication Channels. Emotions, Attitude and IQ Related to Irony Across Gender. *Psychology of Language and Communication* 17: 115-132.
- Mills, S. (2009). Impoliteness in a cultural context. *Journal of Pragmatics* 41: 1047-1060.
- Mumsnet, About us, <http://www.mumsnet.com/info/aboutus> (page last updated on 29/01/2015, retrieved on 12 May 2015)
- Nelms, J. (2002). Responding to sarcasm and irony. Paper presented at the *Annual Convention of the International Society of Humor Studies (July 7)*. Forli, Italy,
- Partington, A. (2004). Corpora and discourse: a most congruous beast. In A. Partington, J. Morley L. and Haarman (eds.) *Corpora and Discourse* 11-20. Bern: Peter Lang.
- Partington, A., Duguid, A. and Taylor, C. (2013). *Patterns and Meanings in Discourse: Corpus-Assisted Case Studies*. Amsterdam: John Benjamins.
- Partington, A. (2014). Mind the gaps: The role of corpus linguistics in researching absences. *International Journal of Corpus Linguistics* 19: 118–146
- Phillips, M. (1985). *Aspects of Text Structure: An Investigation of the Lexical Organisation of Text*. Oxford: Elsevier Science Publishers.

- Richardson, D. S. and Green, L. R. (2003). Defining direct and indirect aggression: The Richardson Conflict Response Questionnaire. *International Review of Social Psychology* 16: 11-30.
- Rockwell, P. A. (2006). *Sarcasm and other Mixed Messages: The Ambiguous Ways People Use Language*. Lewiston: Edwin Mellen Press.
- Rockwell, P. and E.M. Theriot (2001). Culture, gender, and gender mix in encoders of sarcasm: A self-assessment analysis. *Communication Research Reports* 18: 44-52.
- Romero-Trillo, J. (2008). Introduction: pragmatics and corpus linguistics: a mutualistic entente. In J. Romero-Trillo (ed) *Pragmatics and Corpus Linguistics: A Mutualistic Entente* 1-10. Berlin: Mouton de Gruyter.
- Rychly, P. and Kilgarriff, A. (2007). An efficient algorithm for building a distributional thesaurus. *Proc ACL*. Prague, Czech Republic. Retrieved on 12 May 2015 from <http://www.kilgarriff.co.uk/Publications/2007-RychlyKilg-ACL-thesauruses.pdf>
- Scott, M., 2008, *WordSmith Tools version 5*, Liverpool: Lexical Analysis Software.
- Scott, M. and Tribble, C. (2006). *Textual Patterns: Key Words and Corpus Analysis in Language Education*. Amsterdam: John Benjamins Publishing.
- Spencer-Oatey, H. (2000). Rapport management: A framework for analysis. In H. Spencer-Oatey (ed) *Culturally Speaking: Managing Rapport through Talk across Cultures* 11-46. London & New York: Continuum.
- Spencer-Oatey, H. (2002). Managing rapport in talk: Using rapport sensitive incidents to explore the motivational concerns underlying the management of relations. *Journal of Pragmatics* 34: 529-545.

- Spencer-Oatey, H. (2008). Face,(im) politeness and rapport. In H. Spencer-Oatey (ed.) *Culturally Speaking: Culture, Communication and Politeness Theory* 11-47. London: Continuum International Publishing Group.
- Taylor, C. (2011). Negative politeness features and impoliteness: A corpus-assisted approach. In B. Davies, A. Merrison and M. Haugh (eds.), *Situated Politeness* 209-231. London: Continuum.
- Taylor, C. (2012, September). And there it isn't: (how) can we access the absent using CADS? Paper presented at *Corpus-Assisted Discourse Studies International Conference*, Bologna.
- Taylor, C. (2013). Searching for similarity using corpus-assisted discourse studies. *Corpora*, 8: 81-113.
- Taylor, C. (2015a). *Mock Politeness in English and Italian: A Corpus-assisted Study of the Metalanguage of Sarcasm and Irony*. Unpublished PhD thesis, Lancaster University.
- Taylor, C. (2015b). Beyond sarcasm: The metalanguage and structures of mock politeness. *Journal of Pragmatics* 87: 127-141.
- Taylor, C. (2015c). Why are women so bitchy? Mock politeness & gender. *Corpus Linguistics 2015*, Lancaster University 20-24 July.
- Watts, R., Ide, S. and Ehrlich, K. (1992). Introduction. In R. Watts, S. Ide and K. Ehrlich (eds.) *Politeness in Language: Study in its History, Theory and Practice* 1-17. Berlin: Mouton de Gruyter.
- Widdowson, H. (2004). *Text, Context, Pretext: Critical Issues in Discourse Analysis*. Oxford: Blackwell.

Wilson, D. (2013). Irony comprehension: A developmental perspective. *Journal of Pragmatics* 59: 40-56.